

REMARKS

I. Status of claims

Claims 6-7, 16-17, and 22 are pending in this application. By this Amendment, claims 6, 16, and 22 have been amended, and claims 1-5, 8-15, 18-21 and 23 have been cancelled. Reconsideration is respectfully requested in view of the above Amendments and the following remarks.

II. Rejection under 35 U.S.C. § 103(a)

Claims 1-15 and 18-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP Patent Publication (Kokai) No. 4-93237 (JP'237) in view of JP Patent Publication (Kokai) No. 5-222781 (JP'781) and JP Patent Publication (Kokai) No. 10-330141 (JP'141).

As noted above, only claims 6, 7, 16, 17 and 22₄ are now pending. Claims 6 and 16 are independent, the remaining are dependent claims.

Claim 6 claims a colored building board formed from front, back and core layers each of which have been dry formed. In particular, at least the front layer includes therein pigment, to provide a finished color, and at least one anti-efflorescence agent, with the latter forming insoluble salts as the self-curing inorganic material within the front layer cure. These insoluble salts prevent efflorescence and create other permeation properties of the finished board.

Claim 16 claims a manufacturing method in which the steps include dry forming front, core and back layers so that a series of finished densities are formed in the various layers, as set forth, and where at least the front layer has incorporated therein both pigment and at least one anti-efflorescence agent so that during curing the board becomes suitably colored and insoluble salts are formed in the building board.

The Examiner had rejected all claims over JP'237 in view of JP'781 and JP'141. The Examiner has already confirmed the inadequacy of JP'237 and clearly that reference does not teach or suggest the incorporation of both pigment and at least one anti-efflorescence agent with the latter producing "insoluble" salts simultaneously with curing.

JP'781 suggests painting the exterior or forming a dense colored layer on the exterior surface of a board. JP'781 does not teach the incorporation of pigment into one or more of the layers as initially formed prior to curing.

JP'141 teaches use of "an acid forming water-soluble calcium salt or sodium salt etc. at $\text{pK} \geq 3$ ", using "acetic acid, lactic acid or cinnamic acid". Formation of water-soluble salts teaches away from the present invention's formation of "insoluble" salts as claimed herein. Further, claims 7 and 17 are limited to using "fluoride, carbonate, polyaminocarboxylic and maleic acid". Further, since JP'141 refers to a "hydraulic" product, use of water retention agents, and spraying the efflorescence agent, the system would be considered to be a "wet" process. This teaches away from the claimed dry process, as well as from its proposed combination with JP'237 since this uses a dry process. Also, there is nothing in JP'141 to suggest the structure claimed herein.

Consequently, the amended forms of claims 6, 7, 16, 17 and 22 are respectfully submitted to patentably distinguish from the cited references. In addition, it is respectfully submitted that JP'237, JP'781 and JP'141 are not properly combinable (wet plus dry processing are not viewed as being combinable systems) and they do not collectively suggest the present invention as claimed. Further, as noted above, the creation and use of water-soluble salts in JP'141 teaches away from the claimed formation of insoluble salts that serve to clog the interstices in the inorganic material, improve the diffusion and permeation resistance to water, and thereby prevent efflorescence generation. Water soluble salts would dissolve in such an environment and not provide the desired diffusion and permeation resistance to water (see, Specification, page 14).

CONCLUSION

Applicant respectfully requests allowance of the pending claims in light of the amendments and the above comments.

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The Commissioner is hereby authorized to charge any additional fees that are required or credit any overpayment to Deposit Account No.19-2112 referencing HIAS.96551.

Respectfully submitted,



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Peter W. Gowdey
Reg. No. 25,872

SHOOK, HARDY & BACON L.L.P.
600 14th Street, NW
Suite 800
Washington, DC 20005-2004
Phone: (202)783-8400
Fax: (202)783-4211